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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,389	01/05/2004	Tukaram K. Hatwar	87415RLO	2643

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EXAMINER

CHAN, SING P

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/751,389

Applicant(s)

HATWAR, TUKARAM K.

Examiner

Sing P. Chan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

1. Applicant's confirmation of election of Group I, Claims 1, 2, and 4 in the reply filed on September 26, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the restriction requirement is made final (MPEP § 818.03(a)).
2. This application contains claim 4 drawn to an invention nonelected with traverse in Paper filed on September 26, 2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation of "one or more light emitting layer(s) which produce white in an OLED device" is unclear. For the purpose of examination, "one or more light emitting layer(s) which produce white light in an OLED device" will be assumed.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolk (U.S. 6,194,119) in view of Gaudiana et al (U.S. 6,624,839) and Jackson et al (U.S. 6,720,572).

Regarding claim 1, Wolk discloses a method of forming OLEDs. The method includes providing an anode on a substrate, a hole transport layer on the anode, a white light emitting polymer emitter on the hole transport layer (Col 18, lines 21-23), and a cathode on the emitter layer. (Col 16, line 66 to Col 17, line 4) The anode and cathode are formed of metal, alloys, metallic compounds, and metal oxides (Col 15, lines 48-54), which are deposited by vapor deposition (Col 10, lines 56-60). The light emitting layer and hole transporting layer are applied by transferring the material from a transfer donor element by coating the donor element with the material (Col 5, lines 47-50) and the element is brought into intimate contact with receptor or substrate, a radiation source is used to heat the layer in an imagewise fashion to perform the imagewise transfer of the layer. (Col 7, lines 18-27) To form full color device, color filters are deposited prior to depositing light emitter. (Col 18, lines 18-23) Wolk is silent as to forming the color filter on the other side of the substrate and the light-emitting layer(s) is/are unpatterned. However, forming the color filter on either side of the OLED device is well known and

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conventional as shown for example by Gaudiana et al. Gaudiana et al discloses a method of forming light emitting diode (OLED) with color filter. The color filter arrays are either deposited onto the light-receiving surface of the substrate or are deposited onto the opposite light-emitting surface of the substrate (Col 7, lines 25-31), which are all equivalents.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the color filter arrays on either side of the substrate as disclosed by Gaudiana et al as modified by Wolk to provide a color filter arrays on the either side substrate, which are all equivalents. Wolk as modified by Gaudiana et al is silent as to the light-emitting layer(s) is/are unpatterned. However, forming the light-emitting layer(s) in either patterned or unpatterned is well known and conventional as shown for example by Jackson et al. Jackson et al discloses a method of forming an organic light emitter. The method includes forming the light emitting pixels or light emitting layer(s) as either patterned or unpatterned pixels. (Col 5, lines 16-27)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the light-emitting layer(s) as either patterned or unpatterned layer(s) as disclosed by Jackson et al in the method of Wolk as modified by Gaudiana et al, which are all equivalents.

Regarding claim 2, Wolk discloses the material on the transfer donor element can be patterned via selective thermal transfer from the donor to a receptor (Col 5, lines 48-64), which forms any pattern such as patches of transferable material.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wolk (U.S. 6,194,119) in view of Kunimoto et al (U.S. 6,258,954) and Jackson et al (U.S. 6,720,572).

Wolk discloses a method of forming a donor element. The method includes providing a donor substrate such as polymer films, which are flexible (Col 7, lines 62-64), applying the coating material by solvent coating and drying (Col 5, lines 65-67), wherein the transfer material is transferred by radiation heating such as laser (Col 6, lines 60-66) and the material include a white light emitter (Col 18, lines 21-22). Wolk is silent as to inspecting the coated donor element prior to transfer and the light-emitting layer(s) is/are unpatterned. However, inspecting the coating after forming the coating is well known and conventional as shown for example by Kunimoto et al. Kunimoto et al discloses a method of coating a substrate with fluorescence coating. The method includes applying a fluorescence coating material to a substrate by spraying, dipping, spreading or electrodeposition, drying or curing the resin of the coating, and inspecting fluorescence coating material after the coating is cured to detect any defects. (Col 26, lines 49-67)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to inspect the coating material on the coated substrate as disclosed by Kunimoto et al in the method of Wolk to easily detect any defects or void to allow easy quality assurance. (See Kunimoto et al, Col 26, lines 62-67 and Col 27, lines 41-43) Wolk as modified by Kunimoto et al is silent as to the light-emitting layer(s) is/are unpatterned. However, forming the light-emitting layer(s) in either patterned or

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unpatterned is well known and conventional as shown for example by Jackson et al. Jackson et al discloses a method of forming an organic light emitter. The method includes forming the light emitting pixels or light emitting layer(s) as either patterned or unpatterned pixels. (Col 5, lines 16-27)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the light-emitting layer(s) as either patterned or unpatterned layer(s) as disclosed by Jackson et al in the method of Wolk as modified by Gaudiana et al, which are all equivalents.

Response to Arguments

8. Applicant's arguments, see Page 5, lines 23-28, filed September 26, 2005, with respect to the rejection(s) of claim(s) 1, 2, and 4 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of additional reference to Jackson et al (U.S. 6,720,572).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sing P. Chan whose telephone number is 571-272-1225. The examiner can normally be reached on Monday-Thursday 7:30AM-11:00AM and 12:00PM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher A. Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chan Sing Po

SPC

ca-fiorilla

CHRIS FIORILLA
SUPERVISORY PATENT EXAMINER

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